

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: GORDON POND	Lake Area (ha):	1.21
Town: LINCOLN	Maximum depth (m):	3.8
County: Grafton	Mean depth (m):	1.5
River Basin: Merrimack	Volume (m <sup>3</sup> ):	18000
Latitude: 44°04'04" N	Relative depth:	2.9
Longitude: 71°45'20" W	Shore configuration:	1.62
Elevation (ft): 2567	Areal water load (m/yr):	67.37
Shore length (m): 630	Flushing rate (yr <sup>-1</sup> ):	45.20
Watershed area (ha): 107.1	P retention coeff.:	0.30
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

7 February 1997

5 August 1996

DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - MOSTLY	TABELLARIA 50%
	#2	DETRITUS AND BENTHIC	MOUGEOTIA 35%
	#3	DIATOM FRUSTULES	
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			1.36
DOM. ZOOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	SPARSE - NO DOMINANT
	#2		
	#3		
ROTIFERS/LITER		4	<1
MICROCRUSTACEA/LITER		<1	14
ZOOPLANKTON ABUNDANCE (#/L)		15	14
VASCULAR PLANT ABUNDANCE			Common/Abun
SECCHI DISK TRANSPARENCY (m)			2.5
BOTTOM DISSOLVED OXYGEN (mg/L)		3.0	3.2
BACTERIA (E. coli, #/100 ml)	#1		1
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: GORDON POND

Town: LINCOLN

	7 February 1997		5 August 1996		
DEPTH (m)	2.5		2.0		
pH (units)	5.3		4.6		
A.N.C. (Alkalinity)	1.6		-0.8		
NITRATE NITROGEN	< 0.05		< 0.05		
TOTAL KJELDAHL NITROGEN	0.34		0.33		
TOTAL PHOSPHORUS	0.008		0.011		
CONDUCTIVITY ( $\mu$ mhos/cm)	22.8		21.7		
APPARENT COLOR (cpu)	70		85		
MAGNESIUM			0.20		
CALCIUM			1.0		
SODIUM			< 1.0		
POTASSIUM			< 0.40		
CHLORIDE	< 2		< 2		
SULFATE	3		3		
TN : TP	43		30		
CALCITE SATURATION INDEX					

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1996**

D.O. S.D. PLANT CHL TOTAL CLASS

**	3	4	0	7	Meso.
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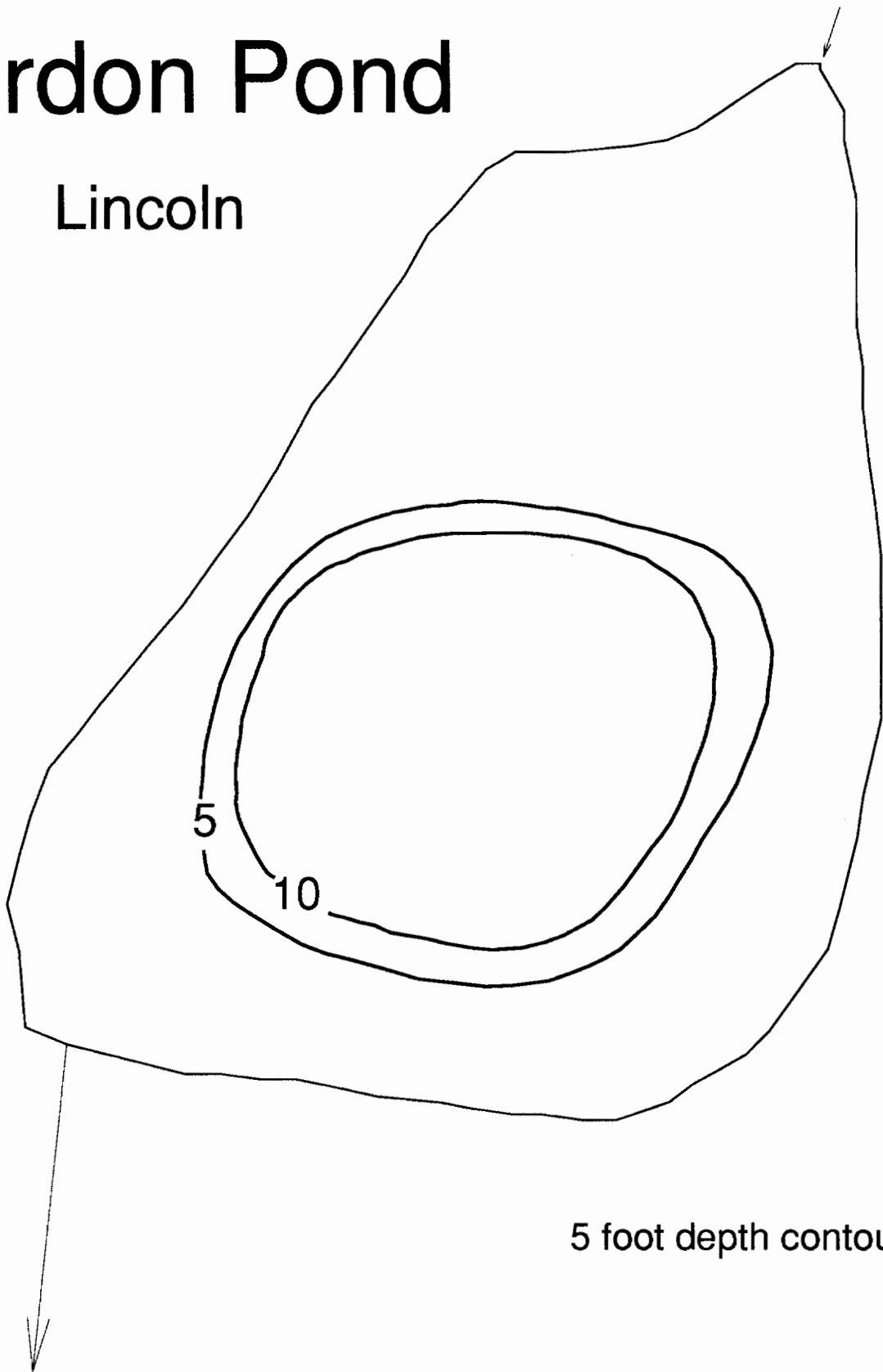
**COMMENTS:** <sup>1</sup> This is a high elevation, remote pond located within the White Mountain National Forest on the southern slope of Mount Wolf. It was sampled jointly with the Fish and Game Department.

2. Motorboats are not allowed.
3. Gordon Pond is an acid, tea-colored pond with essentially no buffering capacity (A.N.C.).
4. Phytoplankton and zooplankton were both sparse. One of the dominant genera of phytoplankton was *Mougeotia*, a filamentous green alga that is often abundant in acid ponds.
5. The water level was down about three feet; the beaver dam was open.

# Gordon Pond

Lincoln

N



5 foot depth contours

0

0.1

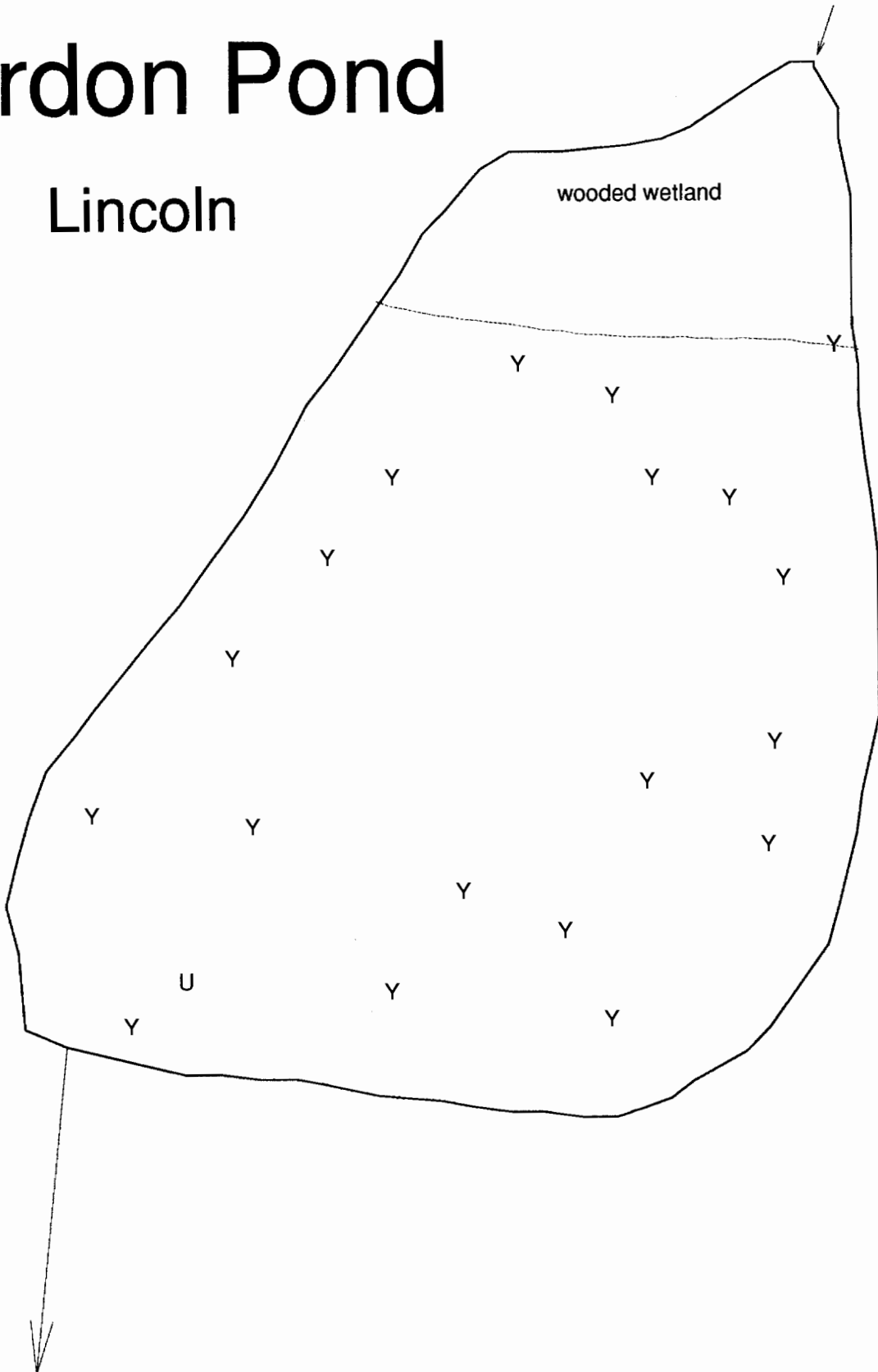
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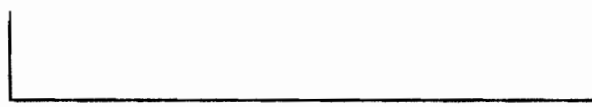
# Gordon Pond

Lincoln



wooded wetland

0 0.1



Km

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